



39766-0033 saved July 9, 2007.txt

SEQUENCE LISTING

<110> Presta, Leonard G.  
Shelton, David L.  
Urfer, Roman

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<150> 09/156,923

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Pro Glu Asn Ile Thr Glu Ile Phe Ile Ala Asn Gln Lys Arg Leu Glu
 65           70           75           80
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 85           90           95
Thr Ile Val Asp Ser Gly Leu Lys Phe Val Ala His Lys Ala Phe Leu
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Lys Asn Ser Asn Leu Gln His Ile Asn Phe Thr Arg Asn Lys Leu Thr
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145           150           155           160
Thr Leu Gln Glu Ala Lys Ser Ser Pro Asp Thr Gln Asp Leu Tyr Cys
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Pro Trp Tyr Gln Leu Ser Asn Asn Glu Val Ile Glu Cys Ile Thr Gln
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Gly Arg Val Leu Gln Arg Pro Arg Thr Cys Pro Gln Glu Val Tyr Glu
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210      215      220
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325      330      335
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Asp Asp Gly Ala Asn Pro Asn Tyr Pro Asp Val Ile Tyr Glu Asp Tyr
385      390      395      400
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405      410      415
Ile Pro Ser Thr Asp Val Thr Asp Lys Thr Gly Arg Glu His Leu Ser
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435      440      445
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 aaaaaaaaaa accgc 2715

<210> 6  
 <211> 839  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
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 Leu Leu Gly Ser Val Trp Leu Asp Tyr Val Gly Ser Val Leu Ala Cys  
 20 25 30

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Pro	Ala	Asn	Cys	Val	Cys	Ser	Lys	Thr	Glu	Ile	Asn	Cys	Arg	Arg	Pro
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Ser	Asn	Gly	Asn	Ala	Asn	Ile	Asn	Ile	Thr	Asp	Ile	Ser	Arg	Asn	Ile
	65				70				75					80	
Thr	Ser	Ile	His	Ile	Glu	Asn	Trp	Arg	Ser	Leu	His	Thr	Leu	Asn	Ala
			85					90					95		
Val	Asp	Met	Glu	Leu	Tyr	Thr	Gly	Leu	Gln	Lys	Leu	Thr	Ile	Lys	Asn
		100					105					110			
Ser	Gly	Leu	Arg	Ser	Ile	Gln	Pro	Arg	Ala	Phe	Ala	Lys	Asn	Pro	His
	115					120				125					
Leu	Arg	Tyr	Ile	Asn	Leu	Ser	Ser	Asn	Arg	Leu	Thr	Thr	Leu	Ser	Trp
	130					135				140					
Gln	Leu	Phe	Gln	Thr	Leu	Ser	Leu	Arg	Glu	Leu	Gln	Leu	Glu	Gln	Asn
	145				150				155					160	
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Gln	Gly	Glu	Ala	Lys	Leu	Asn	Ser	Gln	Asn	Leu	Tyr	Cys	Ile	Asn	Ala
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Val	Asp	Trp	Ile	Val	Thr	Gly	Leu	Gln	Ser	Ile	Asn	Thr	His	Gln	Thr
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Asn	Leu	Asn	Trp	Thr	Asn	Val	His	Ala	Ile	Asn	Leu	Thr	Leu	Val	Asn
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Val	Thr	Ser	Glu	Asp	Asn	Gly	Phe	Thr	Leu	Thr	Cys	Ile	Ala	Glu	Asn
		275				280					285				
Val	Val	Gly	Met	Ser	Asn	Ala	Ser	Val	Ala	Leu	Thr	Val	Tyr	Tyr	Pro
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Pro	Arg	Val	Val	Ser	Leu	Glu	Glu	Pro	Glu	Leu	Arg	Leu	Glu	His	Cys
	305				310				315					320	
Ile	Glu	Phe	Val	Val	Arg	Gly	Asn	Pro	Pro	Pro	Thr	Leu	His	Trp	Leu
			325					330					335		
His	Asn	Gly	Gln	Pro	Leu	Arg	Glu	Ser	Lys	Ile	Ile	His	Val	Glu	Tyr
			340					345					350		
Tyr	Gln	Glu	Gly	Glu	Ile	Ser	Glu	Gly	Cys	Leu	Leu	Phe	Asn	Lys	Pro
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Thr	His	Tyr	Asn	Asn	Gly	Asn	Tyr	Thr	Leu	Ile	Ala	Lys	Asn	Pro	Leu
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Pro	Glu	Ser	Thr	Asp	Asn	Phe	Ile	Leu	Phe	Asp	Glu	Val	Ser	Pro	Thr
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Ser	Ile	Ala	Val	Gly	Leu	Ala	Ala	Phe	Ala	Cys	Val	Leu	Leu	Val	Val
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Leu	Phe	Val	Met	Ile	Asn	Lys	Tyr	Gly	Arg	Arg	Ser	Lys	Phe	Gly	Met
	450				455						460				
Lys	Gly	Pro	Val	Ala	Val	Ile	Ser	Gly	Glu	Glu	Asp	Ser	Ala	Ser	Pro
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Leu	His	His	Ile	Asn	His	Gly	Ile	Thr	Thr	Pro	Ser	Ser	Leu	Asp	Ala
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Gly	Pro	Asp	Thr	Val	Val	Ile	Gly	Met	Thr	Arg	Ile	Pro	Val	Ile	Glu
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Asn	Pro	Gln	Tyr	Phe	Arg	Gln	Gly	His	Asn	Cys	His	Lys	Pro	Asp	Thr
		515				520						525			
Tyr	Val	Gln	His	Ile	Lys	Arg	Arg	Asp	Ile	Val	Leu	Lys	Arg	Glu	Leu

530	Gly	Glu	Gly	Ala	Phe	Gly	Lys	Val	Phe	Leu	Ala	Glu	Cys	Tyr	Asn	Leu
545	Ser	Pro	Thr	Lys	Asp	Lys	Met	Leu	Val	Ala	Val	Lys	Ala	Leu	Lys	Asp
	Pro	Thr	Leu	Ala	Ala	Arg	Lys	Asp	Phe	Gln	Arg	Glu	Ala	Glu	Leu	Leu
	Thr	Asn	Leu	Gln	His	Glu	His	Ile	Val	Lys	Phe	Tyr	Gly	Val	Cys	Gly
	Asp	Gly	Asp	Pro	Leu	Ile	Met	Val	Phe	Glu	Tyr	Met	Lys	His	Gly	Asp
	Leu	Asn	Lys	Phe	Leu	Arg	Ala	His	Gly	Pro	Asp	Ala	Met	Ile	Leu	Val
	Asp	Gly	Gln	Pro	Arg	Gln	Ala	Lys	Gly	Glu	Leu	Gly	Leu	Ser	Gln	Met
	Leu	His	Ile	Ala	Ser	Gln	Ile	Ala	Ser	Gly	Met	Val	Tyr	Leu	Ala	Ser
	Gln	His	Phe	Val	His	Arg	Asp	Leu	Ala	Thr	Arg	Asn	Cys	Leu	Val	Gly
	Ala	Asn	Leu	Leu	Val	Lys	Ile	Gly	Asp	Phe	Gly	Met	Ser	Arg	Asp	Val
	Tyr	Ser	Thr	Asp	Tyr	Tyr	Arg	Leu	Phe	Asn	Pro	Ser	Gly	Asn	Asp	Phe
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	Val	Trp	Ser	Phe	Gly	Val	Ile	Leu	Trp	Glu	Ile	Phe	Thr	Tyr	Gly	Lys
	Gln	Pro	Trp	Phe	Gln	Leu	Ser	Asn	Thr	Glu	Val	Ile	Glu	Cys	Ile	Thr
	Gln	Gly	Arg	Val	Leu	Glu	Arg	Pro	Arg	Val	Cys	Pro	Lys	Glu	Val	Tyr
	Asp	Val	Met	Leu	Gly	Cys	Trp	Gln	Arg	Glu	Pro	Gln	Gln	Arg	Leu	Asn
	Ile	Lys	Glu	Ile	Tyr	Lys	Ile	Leu	His	Ala	Leu	Gly	Lys	Ala	Thr	Pro
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&lt;210&gt; 7

&lt;211&gt; 1858

&lt;212&gt; DNA

&lt;213&gt; Homo sapiens

&lt;400&gt; 7

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<210> 8  
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 <212> PRT  
 <213> Homo sapiens

<400> 8

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			20					25					30		
Pro	Ala	Asn	Cys	Val	Cys	Ser	Lys	Thr	Glu	Ile	Asn	Cys	Arg	Arg	Pro
		35					40					45			
Asp	Asp	Gly	Asn	Leu	Phe	Pro	Leu	Leu	Glu	Gly	Gln	Asp	Ser	Gly	Asn
	50					55					60				
Ser	Asn	Gly	Asn	Ala	Asn	Ile	Asn	Ile	Thr	Asp	Ile	Ser	Arg	Asn	Ile
65				70					75					80	
Thr	Ser	Ile	His	Ile	Glu	Asn	Trp	Arg	Ser	Leu	His	Thr	Leu	Asn	Ala
			85					90					95		
Val	Asp	Met	Glu	Leu	Tyr	Thr	Gly	Leu	Gln	Lys	Leu	Thr	Ile	Lys	Asn
		100					105					110			
Ser	Gly	Leu	Arg	Ser	Ile	Gln	Pro	Arg	Ala	Phe	Ala	Lys	Asn	Pro	His
		115				120					125				
Leu	Arg	Tyr	Ile	Asn	Leu	Ser	Ser	Asn	Arg	Leu	Thr	Thr	Leu	Ser	Trp
	130					135					140				
Gln	Leu	Phe	Gln	Thr	Leu	Ser	Leu	Arg	Glu	Leu	Gln	Leu	Glu	Gln	Asn
145					150				155					160	
Phe	Phe	Asn	Cys	Ser	Cys	Asp	Ile	Arg	Trp	Met	Gln	Leu	Trp	Gln	Glu
			165					170					175		
Gln	Gly	Glu	Ala	Lys	Leu	Asn	Ser	Gln	Asn	Leu	Tyr	Cys	Ile	Asn	Ala
			180					185					190		
Asp	Gly	Ser	Gln	Leu	Pro	Leu	Phe	Arg	Met	Asn	Ile	Ser	Gln	Cys	Asp
		195					200					205			
Leu	Pro	Glu	Ile	Ser	Val	Ser	His	Val	Asn	Leu	Thr	Val	Arg	Glu	Gly
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225					230				235					240	
Val	Asp	Trp	Ile	Val	Thr	Gly	Leu	Gln	Ser	Ile	Asn	Thr	His	Gln	Thr
			245					250					255		
Asn	Leu	Asn	Trp	Thr	Asn	Val	His	Ala	Ile	Asn	Leu	Thr	Leu	Val	Asn
			260					265					270		
Val	Thr	Ser	Glu	Asp	Asn	Gly	Phe	Thr	Leu	Thr	Cys	Ile	Ala	Glu	Asn
		275					280					285			
Val	Val	Gly	Met	Ser	Asn	Ala	Ser	Val	Ala	Leu	Thr	Val	Tyr	Tyr	Pro
	290					295					300				
Pro	Arg	Val	Val	Ser	Leu	Glu	Glu	Pro	Glu	Leu	Arg	Leu	Glu	His	Cys
305					310				315					320	
Ile	Glu	Phe	Val	Val	Arg	Gly	Asn	Pro	Pro	Pro	Thr	Leu	His	Trp	Leu

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His Asn Gly Gln Pro Leu Arg Glu Ser Lys Ile Ile His Val Glu Tyr
          340          345          350
Tyr Gln Glu Gly Glu Ile Ser Glu Gly Cys Leu Leu Phe Asn Lys Pro
          355          360          365
Thr His Tyr Asn Asn Gly Asn Tyr Thr Leu Ile Ala Lys Asn Pro Leu
          370          375          380
Gly Thr Ala Asn Gln Thr Ile Asn Gly His Phe Leu Lys Glu Pro Phe
385          390          395          400
Pro Glu Ser Thr Asp Asn Phe Ile Leu Phe Asp Glu Val Ser Pro Thr
          405          410          415
Pro Pro Ile Thr Val Thr His Lys Pro Glu Glu Asp Thr Phe Gly Val
          420          425          430
Ser Ile Ala Val Gly Leu Ala Ala Phe Ala Cys Val Leu Leu Val Val
          435          440          445
Leu Phe Val Met Ile Asn Lys Tyr Gly Arg Arg Ser Lys Phe Gly Met
          450          455          460
Lys Gly Pro Val Ala Val Ile Ser Gly Glu Glu Asp Ser Ala Ser Pro
465          470          475          480
Leu His His Ile Asn His Gly Ile Thr Thr Pro Ser Ser Leu Asp Ala
          485          490          495
Gly Pro Asp Thr Val Val Ile Gly Met Thr Arg Ile Pro Val Ile Glu
          500          505          510
Asn Pro Gln Tyr Phe Arg Gln Gly His Asn Cys His Lys Pro Asp Thr
          515          520          525
Trp Val Phe Ser Asn Ile Asp Asn His Gly Ile Leu Asn Leu Lys Asp
          530          535          540
Asn Arg Asp His Leu Val Pro Ser Thr His Tyr Ile Tyr Glu Glu Pro
545          550          555          560
Glu Val Gln Ser Gly Glu Val Ser Tyr Pro Arg Ser His Gly Phe Arg
          565          570          575
Glu Ile Met Leu Asn Pro Ile Ser Leu Pro Gly His Ser Lys Pro Leu
          580          585          590
Asn His Gly Ile Tyr Val Glu Asp Val Asn Val Tyr Phe Ser Lys Gly
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Arg His Gly Phe
610

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<210> 9  
 <211> 790  
 <212> PRT  
 <213> Homo sapiens

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Ala Ala Pro Cys Pro Asp Ala Cys Cys Pro His Gly Ser Ser Gly Leu
          35          40          45
Arg Cys Thr Arg Asp Gly Ala Leu Asp Ser Leu His His Leu Pro Gly
          50          55          60
Ala Glu Asn Leu Thr Glu Leu Tyr Ile Glu Asn Gln Gln His Leu Gln
65          70          75          80
His Leu Glu Leu Arg Asp Leu Arg Gly Leu Gly Glu Leu Arg Asn Leu
          85          90          95
Thr Ile Val Lys Ser Gly Leu Arg Phe Val Ala Pro Asp Ala Phe His
          100          105          110
Phe Thr Pro Arg Leu Ser Arg Leu Asn Leu Ser Phe Asn Ala Leu Glu
          115          120          125
Ser Leu Ser Trp Lys Thr Val Gln Gly Leu Ser Leu Gln Glu Leu Val
          130          135          140

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Leu 145	Ser	Gly	Asn	Pro	Leu 150	His	Cys	Ser	Cys	Ala 155	Leu	Arg	Trp	Leu 160	Gln
Arg	Trp	Glu	Glu	Glu 165	Gly	Leu	Gly	Gly	Val 170	Pro	Glu	Gln	Lys	Leu 175	Gln
Cys	His	Gly	Gln 180	Gly	Pro	Leu	Ala	His 185	Met	Pro	Asn	Ala	Ser 190	Cys	Gly
Val	Pro	Thr 195	Leu	Lys	Val	Gln	Val	Pro 200	Asn	Ala	Ser	Val 205	Asp	Val	Gly
Asp 210	Asp	Val	Leu	Leu	Arg	Cys 215	Gln	Val	Glu	Gly	Arg 220	Gly	Leu	Glu	Gln
Ala 225	Gly	Trp	Ile	Leu	Thr 230	Glu	Leu	Glu	Gln	Ser 235	Ala	Thr	Val	Met	Lys 240
Ser	Gly	Gly	Leu	Pro 245	Ser	Leu	Gly	Leu	Thr 250	Leu	Ala	Asn	Val	Thr 255	Ser
Asp	Leu	Asn	Arg 260	Lys	Asn	Leu	Thr	Cys 265	Trp	Ala	Glu	Asn	Asp 270	Val	Gly
Arg	Ala	Glu 275	Val	Ser	Val	Gln	Val	Asn 280	Val	Ser	Phe	Pro 285	Ala	Ser	Val
Gln	Leu	His	Thr	Ala	Val	Glu 295	Met	His	His	Trp	Cys 300	Ile	Pro	Phe	Ser
Val 305	Asp	Gly	Gln	Pro	Ala 310	Pro	Ser	Leu	Arg	Trp	Leu	Phe	Asn	Gly	Ser 320
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Ala	Asn	Glu	Thr 340	Val	Arg	His	Gly	Cys 345	Leu	Arg	Leu	Asn	Gln 350	Pro	Thr
His	Val	Asn 355	Asn	Gly	Asn	Tyr	Thr 360	Leu	Leu	Ala	Ala	Asn 365	Pro	Phe	Gly
Gln	Ala	Ser 370	Ala	Ser	Ile	Met 375	Ala	Ala	Phe	Met	Asp 380	Asn	Pro	Phe	Glu
Phe 385	Asn	Pro	Glu	Asp	Pro 390	Ile	Pro	Asp	Thr	Asn 395	Ser	Thr	Ser	Gly	Asp 400
Pro	Val	Glu	Lys	Lys 405	Asp	Glu	Thr	Pro	Phe 410	Gly	Val	Ser	Val	Ala	Val 415
Gly	Leu	Ala	Val 420	Phe	Ala	Cys	Leu	Phe 425	Leu	Ser	Thr	Leu	Leu 430	Leu	Val
Leu	Asn	Lys 435	Cys	Gly	Arg	Arg	Asn 440	Lys	Phe	Gly	Ile	Asn 445	Arg	Pro	Ala
Val	Leu	Ala 450	Pro	Glu	Asp	Gly 455	Leu	Ala	Met	Ser	Leu 460	His	Phe	Met	Thr
Leu 465	Gly	Gly	Ser	Ser	Leu 470	Ser	Pro	Thr	Glu	Gly 475	Lys	Gly	Ser	Gly	Leu 480
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His	His	Ile 500	Lys	Arg	Arg	Asp	Ile	Val 505	Leu	Lys	Trp	Glu	Leu 510	Gly	Glu
Gly	Ala	Phe 515	Gly	Lys	Val	Phe	Leu 520	Ala	Glu	Cys	His	Asn 525	Leu	Leu	Pro
Glu	Gln	Asp 530	Lys	Met	Leu	Val 535	Ala	Val	Lys	Ala	Leu 540	Lys	Glu	Ala	Ser
Glu 545	Ser	Ala	Arg	Gln	Asp 550	Phe	Gln	Arg	Glu	Ala 555	Glu	Leu	Leu	Thr	Met 560
Leu	Gln	His	Gln	His 565	Ile	Val	Arg	Phe	Phe 570	Gly	Val	Cys	Thr	Glu	Gly 575
Arg	Pro	Leu 580	Leu	Met	Val	Phe	Glu	Tyr 585	Met	Arg	His	Gly	Asp 590	Leu	Asn
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Glu	Asp 610	Val	Ala	Pro	Gly	Pro 615	Leu	Gly	Leu	Gly	Gln 620	Leu	Leu	Ala	Val
Ala 625	Ser	Gln	Val	Ala	Ala 630	Gly	Met	Val	Tyr	Leu 635	Ala	Gly	Leu	His	Phe 640
Val	His	Arg	Asp	Leu	Ala	Thr	Arg	Asn	Cys	Leu	Val	Gly	Gln	Gly	Leu

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Val Val Lys Ile Gly Asp Phe Gly Met Ser Arg Asp Ile Tyr Ser Thr
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Asp Tyr Tyr Arg Val Gly Gly Arg Thr Met Leu Pro Ile Arg Trp Met
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Pro Pro Glu Ser Ile Leu Tyr Arg Lys Phe Thr Thr Glu Ser Asp Val
        690          695          700
Trp Ser Phe Gly Val Val Leu Trp Glu Ile Phe Thr Tyr Gly Lys Gln
705          710          715          720
Pro Trp Tyr Gln Leu Ser Asn Thr Glu Ala Ile Asp Cys Ile Thr Gln
        725          730          735
Gly Arg Glu Leu Glu Arg Pro Arg Ala Cys Pro Pro Glu Val Tyr Ala
        740          745          750
Ile Met Arg Gly Cys Trp Gln Arg Glu Pro Gln Gln Arg His Ser Ile
        755          760          765
Lys Asp Val His Ala Arg Leu Gln Ala Leu Ala Gln Ala Pro Pro Val
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Tyr Leu Asp Val Leu Gly
785          790

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 <223> r = g or a

<400> 10  
 tgygayatha tgtggytnaa rac

23

<210> 11  
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<220>  
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 <221> misc\_feature  
 <222> 10  
 <223> y = t or c

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<220>
<221> misc_feature
<222> 9, 18, 21
<223> r = g or a

<400> 11
tggatgcary tntggcarca rca
23

<210> 12
<211> 21
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 10
<223> n = a or g or c or t

<220>
<221> misc_feature
<222> 1, 7, 16
<223> y = t or c

<220>
<221> misc_feature
<222> 4, 13, 19
<223> r = g or a

<400> 12
ytcrtcyttt ccrtaytcrt t
21

<210> 13
<211> 23
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 18
<223> n = a or g or c or t

<220>
<221> misc_feature
<222> 3, 6, 15
<223> y = t or c

<220>
<221> misc_feature
<222> 9, 12
<223> r = g or a

<400> 13
ccytctygrt artaytcnac gtg
23

<210> 14
<211> 22
<212> DNA
<213> Homo sapiens

<400> 14
cacgtcaaca acggcaacta ca
22

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<210> 15  
 <211> 25  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 15  
 ggaaggatga gaaacagatt tctgc 25  
  
 <210> 16  
 <211> 23  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 16  
 catcaatggc cacttcctca agg 23  
  
 <210> 17  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 17  
 aggtgtttcg tccttcttct cc 22  
  
 <210> 18  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 18  
 gagatgtgcc cgaccggtg tatc 24  
  
 <210> 19  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 19  
 cacagtgata ggaggtgtgg ga 22  
  
 <210> 20  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 20  
 ggatgtggct ccaggcccc 19  
  
 <210> 21  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 21  
 gggcaaccg cccacggaa 19  
  
 <210> 22  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens  
  
 <400> 22  
 acgccaggcc aagggtgag 19

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<210> 23
<211> 20
<212> DNA
<213> Homo sapiens

<400> 23
taaccactcc cagcccctgg                20

<210> 24
<211> 20
<212> DNA
<213> Homo sapiens

<400> 24
ttggtggcct ccagcggcag                20

<210> 25
<211> 22
<212> DNA
<213> Homo sapiens

<400> 25
aattcatgac caccagccac ca            22

<210> 26
<211> 20
<212> DNA
<213> Homo sapiens

<400> 26
gctcctcggg actgcgatgc                20

<210> 27
<211> 24
<212> DNA
<213> Homo sapiens

<400> 27
atgtcgccct ggccgaggtg gcat          24

<210> 28
<211> 21
<212> DNA
<213> Homo sapiens

<400> 28
aagctcaaca gccagaacct c             21

<210> 29
<211> 21
<212> DNA
<213> Homo sapiens

<400> 29
cagctctgtg aggatccagc c             21

<210> 30
<211> 21
<212> DNA
<213> Homo sapiens

<400> 30

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ccgaccgggtt ttatcagtga c 21

<210> 31  
 <211> 23  
 <212> DNA  
 <213> Homo sapiens

<400> 31  
 atgatcttgg actcccgag agg 23

<210> 32  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 32  
 cttggccaag gcattctccg t 21

<210> 33  
 <211> 21  
 <212> DNA  
 <213> Homo sapiens

<400> 33  
 atgtgcagca cattaagagg a 21

<210> 34  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens

<400> 34  
 ttatacacag gcttaagcca tcca 24

<210> 35  
 <211> 19  
 <212> DNA  
 <213> Homo sapiens

<400> 35  
 aggaggcatc cagcgaatg 19

<210> 36  
 <211> 9  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Peptide

<400> 36  
 Glu Ser Thr Asp Asn Phe Ile Leu Phe  
 1 5

<210> 37  
 <211> 14  
 <212> PRT  
 <213> Artificial Sequence

<220>  
 <223> Peptide



<400> 37

Leu Phe Asn Pro Ser Gly Asn Asp Phe Cys Ile Trp Cys Glu  
1 5 10

<210> 38

<211> 18

<212> DNA

<213> Homo sapiens

<400> 38

tctccttctc gccggtgg

18

<210> 39

<211> 6

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 39

Ser Pro Ser Arg Arg Trp  
1 5

<210> 40

<211> 11

<212> PRT

<213> Artificial Sequence

<220>

<223> Peptide

<400> 40

Phe Val Leu Phe His Lys Ile Pro Leu Asp Gly  
1 5 10

<210> 41

<211> 84

<212> PRT

<213> Homo sapiens

<400> 41

Trp Val Phe Ser Asn Ile Asp Asn His Gly Ile Leu Asn Leu Lys Asp  
1 5 10 15  
Asn Arg Asp His Leu Val Pro Ser Thr His Tyr Ile Tyr Glu Glu Pro  
20 25 30  
Glu Val Gln Ser Gly Glu Val Ser Tyr Pro Arg Ser His Gly Phe Arg  
35 40 45  
Glu Ile Met Leu Asn Pro Ile Ser Leu Pro Gly His Ser Lys Pro Leu  
50 55 60  
Asn His Gly Ile Tyr Val Glu Asp Val Asn Val Tyr Phe Ser Lys Gly  
65 70 75 80  
Arg His Gly Phe

<210> 42

<211> 247

<212> PRT

<213> Homo sapiens

&lt;400&gt; 42

```

Met Thr Ile Leu Phe Leu Thr Met Val Ile Ser Tyr Phe Gly Cys Met
 1      5      10      15
Lys Ala Ala Pro Met Lys Glu Ala Asn Ile Arg Gly Gln Gly Gly Leu
 20      25      30
Ala Tyr Pro Gly Val Arg Thr His Gly Thr Leu Glu Ser Val Asn Gly
 35      40      45
Pro Lys Ala Gly Ser Arg Gly Leu Thr Ser Leu Ala Asp Thr Phe Glu
 50      55      60
His Met Ile Glu Glu Leu Leu Asp Glu Asp Gln Lys Val Arg Pro Asn
 65      70      75      80
Glu Glu Asn Asn Lys Asp Ala Asp Leu Tyr Thr Ser Arg Val Met Leu
 85      90      95
Ser Ser Gln Val Pro Leu Glu Pro Pro Leu Leu Phe Leu Leu Glu Glu
100      105      110
Tyr Lys Asn Tyr Leu Asp Ala Ala Asn Met Ser Met Arg Val Arg Arg
115      120      125
His Ser Asp Pro Ala Arg Arg Gly Glu Leu Ser Val Cys Asp Ser Ile
130      135      140
Ser Glu Trp Val Thr Ala Ala Asp Lys Lys Thr Ala Val Asp Met Ser
145      150      155      160
Gly Gly Thr Val Thr Val Leu Glu Lys Val Pro Val Ser Lys Gly Gln
165      170      175
Leu Lys Gln Tyr Phe Tyr Glu Thr Lys Cys Asn Pro Met Gly Tyr Thr
180      185      190
Lys Glu Gly Cys Arg Gly Ile Asp Lys Arg His Trp Asn Ser Gln Cys
195      200      205
Arg Thr Thr Gln Ser Tyr Val Arg Ala Leu Thr Met Asp Ser Lys Lys
210      215      220
Arg Ile Gly Trp Arg Phe Ile Arg Ile Asp Thr Ser Cys Val Cys Thr
225      230      235      240
Leu Thr Ile Lys Arg Gly Arg
245

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&lt;210&gt; 43

&lt;211&gt; 258

&lt;212&gt; PRT

&lt;213&gt; Rattus norvegicus

&lt;400&gt; 43

```

Met Ser Ile Leu Phe Tyr Val Ile Phe Leu Ala Tyr Leu Arg Gly Ile
 1      5      10      15
Gln Gly Asn Asn Met Asp Gln Arg Ser Leu Pro Glu Asp Ser Leu Asn
 20      25      30
Ser Leu Ile Ile Lys Leu Ile Gln Ala Asp Ile Leu Lys Asn Lys Leu
 35      40      45
Ser Lys Gln Met Val Asp Val Lys Glu Asn Tyr Gln Ser Thr Leu Pro
 50      55      60
Lys Ala Glu Ala Pro Arg Glu Pro Glu Gln Gly Glu Ala Thr Arg Ser
 65      70      75      80
Glu Phe Gln Pro Met Ile Ala Thr Asp Thr Glu Leu Leu Arg Gln Gln
 85      90      95
Arg Arg Tyr Asn Ser Pro Arg Val Leu Ser Asp Ser Thr Pro Leu
100      105      110
Glu Pro Pro Pro Leu Tyr Leu Met Glu Asp Tyr Val Gly Asn Pro Val
115      120      125
Val Thr Asn Arg Thr Ser Pro Arg Arg Lys Arg Tyr Ala Glu His Lys
130      135      140
Ser His Arg Gly Glu Tyr Ser Val Cys Asp Ser Glu Ser Leu Trp Val
145      150      155      160
Thr Asp Lys Ser Ser Ala Ile Asp Ile Arg Gly His Gln Val Thr Val
165      170      175

```

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```

      165      170      175
Leu Gly Glu Ile Lys Thr Gly Asn Ser Pro Val Lys Gln Tyr Phe Tyr
      180      185      190
Glu Thr Arg Cys Lys Glu Ala Arg Pro Val Lys Asn Gly Cys Arg Gly
      195      200      205
Ile Asp Asp Lys His Trp Asn Ser Gln Cys Lys Thr Ser Gln Thr Tyr
      210      215      220
Val Arg Ala Leu Thr Ser Glu Asn Asn Lys Leu Val Gly Trp Arg Trp
      225      230      235      240
Ile Arg Ile Asp Thr Ser Cys Val Cys Ala Leu Ser Arg Lys Ile Gly
      245      250      255
Arg Thr

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<210> 44  
 <211> 210  
 <212> PRT  
 <213> Homo sapien

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<400> 44
Met Leu Pro Leu Pro Ser Cys Ser Leu Pro Ile Leu Leu Leu Phe Leu
  1      5      10      15
Leu Pro Ser Val Pro Ile Glu Ser Gln Pro Pro Pro Ser Thr Leu Pro
      20      25      30
Pro Phe Leu Ala Pro Glu Trp Asp Leu Leu Ser Pro Arg Val Val Leu
      35      40      45
Ser Arg Gly Ala Pro Ala Gly Pro Pro Leu Leu Phe Leu Leu Glu Ala
      50      55      60
Gly Ala Phe Arg Glu Ser Ala Gly Ala Pro Ala Asn Arg Ser Arg Arg
      65      70      75      80
Gly Val Ser Glu Thr Ala Pro Ala Ser Arg Arg Gly Glu Leu Ala Val
      85      90      95
Cys Asp Ala Val Ser Gly Trp Val Thr Asp Arg Arg Thr Ala Val Asp
      100      105      110
Leu Arg Gly Arg Glu Val Glu Val Leu Gly Glu Val Pro Ala Ala Gly
      115      120      125
Gly Ser Pro Leu Arg Gln Tyr Phe Phe Glu Thr Arg Cys Lys Ala Asp
      130      135      140
Asn Ala Glu Glu Gly Gly Pro Gly Ala Gly Gly Gly Cys Arg Gly
      145      150      155      160
Val Asp Arg Arg His Trp Val Ser Glu Cys Lys Ala Lys Gln Ser Tyr
      165      170      175
Val Arg Ala Leu Thr Ala Asp Ala Gln Gly Arg Val Gly Trp Arg Trp
      180      185      190
Ile Arg Ile Asp Thr Ala Cys Val Cys Thr Leu Leu Ser Arg Thr Gly
      195      200      205
Arg Ala
      210

```

<210> 45  
 <211> 210  
 <212> PRT  
 <213> Homo sapien

```

<400> 45
Met Leu Pro Leu Pro Ser Cys Ser Leu Pro Ile Leu Leu Leu Phe Leu
  1      5      10      15
Leu Pro Ser Val Pro Ile Glu Ser Gln Pro Pro Pro Ser Thr Leu Pro
      20      25      30
Pro Phe Leu Ala Pro Glu Trp Asp Leu Leu Ser Pro Arg Val Val Leu
      35      40      45

```

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Ser	Arg	Gly	Ala	Pro	Ala	Gly	Pro	Pro	Leu	Leu	Phe	Leu	Leu	Glu	Ala
50						55					60				
Gly	Ala	Phe	Arg	Glu	Ser	Ala	Gly	Ala	Pro	Ala	Asn	Arg	Ser	Arg	Arg
65					70					75					80
Gly	Val	Ser	Glu	Thr	Ala	Pro	Ala	Ser	Arg	Arg	Gly	Glu	Leu	Ala	Val
				85					90					95	
Cys	Asp	Ala	Val	Ser	Gly	Trp	Val	Thr	Asp	Arg	Arg	Thr	Ala	Val	Asp
			100					105					110		
Leu	Arg	Gly	Arg	Glu	Val	Glu	Val	Leu	Gly	Glu	Val	Pro	Ala	Ala	Gly
		115					120					125			
Gly	Ser	Pro	Leu	Arg	Gln	Tyr	Phe	Phe	Glu	Thr	Arg	Cys	Lys	Ala	Asp
	130					135					140				
Asn	Ala	Glu	Glu	Gly	Gly	Pro	Gly	Ala	Gly	Gly	Gly	Gly	Cys	Arg	Gly
145					150					155					160
Val	Asp	Arg	Arg	His	Trp	Val	Ser	Glu	Cys	Lys	Ala	Lys	Gln	Ser	Tyr
				165					170					175	
Val	Arg	Ala	Leu	Thr	Ala	Asp	Ala	Gln	Gly	Arg	Val	Gly	Trp	Arg	Trp
			180					185					190		
Ile	Arg	Ile	Asp	Thr	Ala	Cys	Val	Cys	Thr	Leu	Leu	Ser	Arg	Thr	Gly
		195					200					205			
Arg	Ala														
	210														